

Amendments to the Claims:

1-13. (Cancelled)

14. (Currently Amended) An apparatus for providing a modular runtime environment architecture comprising:

a single virtual machine implementation, embodied in at least one tangible computer-readable storage medium and executable utilizing at least one processor, the single virtual machine implementation providing virtual machine functionality;

a plurality of support libraries, embodied in the at least one tangible computer-readable storage medium, wherein a each support library of the plurality of support libraries includes library functions, the virtual machine functionality supported by each support library of the plurality of support libraries; and

a bi-directional virtual machine interface embodied in the at least one tangible computer-readable storage medium, the bi-directional virtual machine interface for communication between a first support library from the plurality of support libraries and the single virtual machine implementation, the bi-directional virtual machine interface defining virtual machine implementation-dependent operations performed by the virtual machine implementation, the bi-directional virtual machine interface supports communication between a second support library from the plurality of support libraries, capable of replacing the first support library, and the virtual machine implementation without modification of the bi-directional virtual machine interface or the virtual machine implementation;

— wherein the virtual machine interface supports communication between a second support library, capable of replacing the first support library, from the plurality of support libraries and the virtual machine implementation, without modification of the virtual machine interface or the virtual machine implementation; and

wherein the virtual machine functionality is supported by any one of the support libraries from the plurality of support libraries.

15. (Currently Amended) An article of manufacture providing a runtime environment, embodied in at least one tangible computer-readable storage medium, comprising in which

a virtual machine implementation, embodied in at least one tangible computer-readable storage medium and executable utilizing at least one processor, that uses a first support library implementation, wherein the first support library implementation can be replaced by a second support library implementation without modifying the virtual machine implementation, and wherein

a bi-directional virtual machine interface, embodied in the at least one tangible computer-readable storage medium, that enables communication between the virtual machine implementation and the first support library and communication between the virtual machine implementation and the second support library.

16. (Currently Amended) A virtual machine implementation, embodied in at least one tangible computer-readable medium an executable utilizing at least one processing unit, suitable for use in a runtime environment, the virtual machine implementation comprising:
- \_\_\_\_\_ having a virtual machine interface, embodied in at least one tangible computer-readable storage medium, defining a number of operations performed by the virtual machine implementation, and wherein the runtime environment has at least some library functions that call virtual machine implementation-dependent functions that perform operations that are dependent on the particular virtual machine implementation used to perform the operations; and
- \_\_\_\_\_ whereby the virtual machine interface defines operations that are virtual machine implementation-dependent, the virtual machine interface supports communication between a first support library and the virtual machine implementation, the virtual machine implementation suitable for a use in conjunction with a plurality of support libraries, including the first support library, that are arranged to conform to the virtual machine interface, the first support library can be replaced by a second support library of the plurality of support libraries without altering the virtual machine interface or virtual machine implementation; and, the virtual machine implementation comprising
- a set of implementation functions, embodied in the at least one tangible computer-readable storage medium, for executing operations defined by the virtual machine interface, and
- wherein the runtime environment has at least some library functions that call virtual machine implementation-dependent functions that perform operations that are dependent on the particular virtual machine implementation used to perform the operations the virtual machine interface with a first support library and the virtual machine implementation, and the virtual machine implementation is suitable for a use in conjunction with a plurality of support libraries that are arranged to conform to the virtual machine interface, whereby the first support library can be replaced by a second support library without altering the virtual machine interface or virtual machine implementation.
17. (Currently Amended) A runtime environment, embodied in at least one tangible computer-readable medium, suitable for use in conjunction with one virtual machine

implementation and a plurality of support libraries, the runtime environment comprising:  
having

a virtual machine implementation, embodied in at least one tangible computer-readable storage medium and executable utilizing at least one processing unit;  
a plurality of support libraries, embodied in the at least one tangible computer-readable storage medium, comprising a first support library including library functions with at least some of the library functions able to call virtual machine implementation-dependent functions that perform virtual machine implementation-dependent operations; and  
      a virtual machine interface, embodied in the at least one tangible computer-readable storage medium, that facilitates communications between [[a]] the first support library and the virtual machine implementation, the virtual machine interface defining virtual machine dependent operations performed by the virtual machine implementation; and wherein:  
      the first support library includes library functions with at least some of the library functions able to call virtual machine implementation-dependent functions that perform virtual machine implementation-dependent operations; and  
      wherein the virtual machine interface defines operations that are virtual machine implementation dependent; [[and]]

wherein the runtime environment is suitable for use in conjunction with a second support library from the plurality of support libraries, capable of replacing the first support library, that has library functions with at least some of the library functions able to call virtual machine implementation-dependent functions that perform virtual machine implementation-dependent operations, the second support library able to conform to the virtual machine interface.